

REMARKS**Present Status of the Application**

The Office Action considers claims 1-69, 72-74, 76, 78, and 79 to be allowable.

The Office Action also rejects claims 75 under 35 U.S.C. 112, first paragraph. The Office Action rejects claims 70, 71, and 77 under 35 U.S.C. 112, second paragraph. The Office Action also objects drawings, specification and claims. Applicants have amended drawings, specification and claims. After entry of foregoing amendments, claims 1-79 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejection

Applicants have amended drawings, specification and claims.

Specifically, with respect to claims 4 and 37, Applicants have filed the preliminary amendment in 07/18/2001, in which the claim 4 is only depending on claim 1, and claim 37 is only depending on claim 34.

After proper amendments, the present invention is in allowable condition.

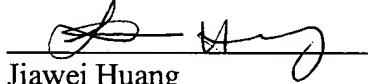
CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-79 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,
J.C. PATENTS

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AMENDMENTS**In The Drawings**

Figs. 1, 3, 4, 5, 7, 8, and 9 have been amended as submitted.

In The Abstract

A method and an apparatus for determining a hopping sequence for [[hoppingly]] selecting a channel from a plurality of channels divided into a plurality of partitions to reduce probability of data collision in a frequency hopping spread spectrum (FHSS) communication system are provided. The communication system stores multiple predetermined partition sequences and receives a first sequence generated by a convention sequence generator.

Annotated Marked-up drawing

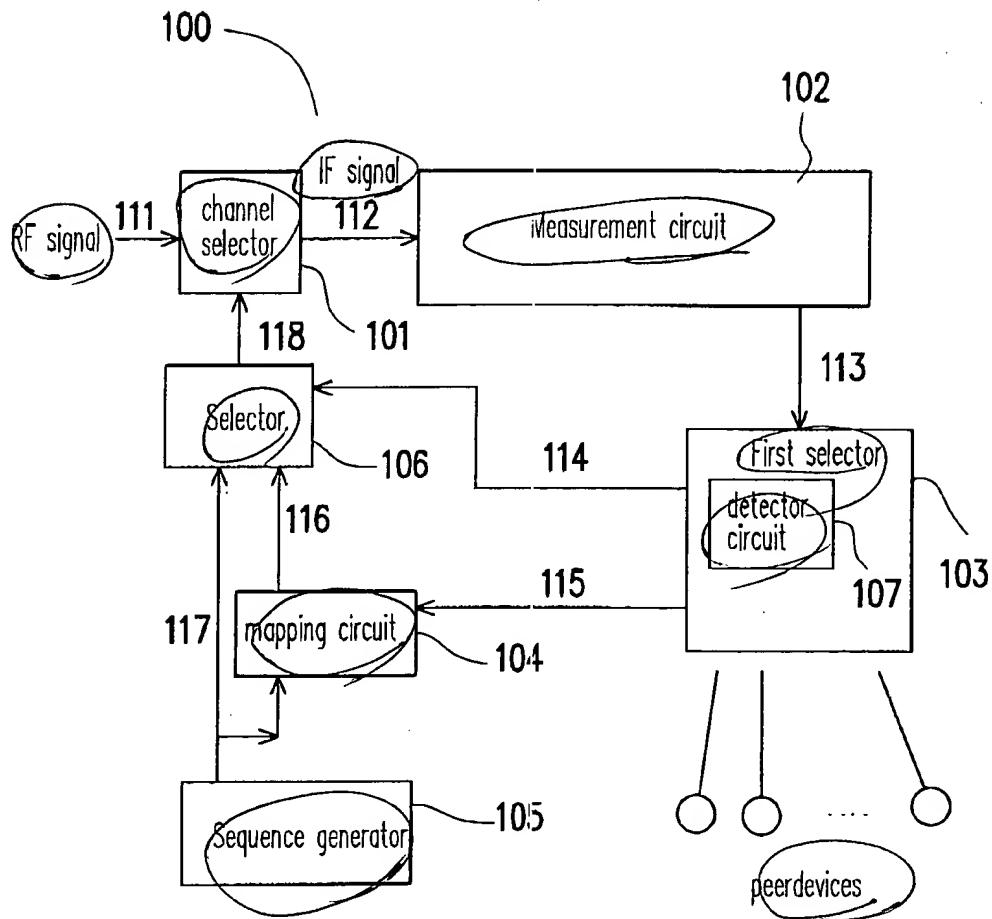
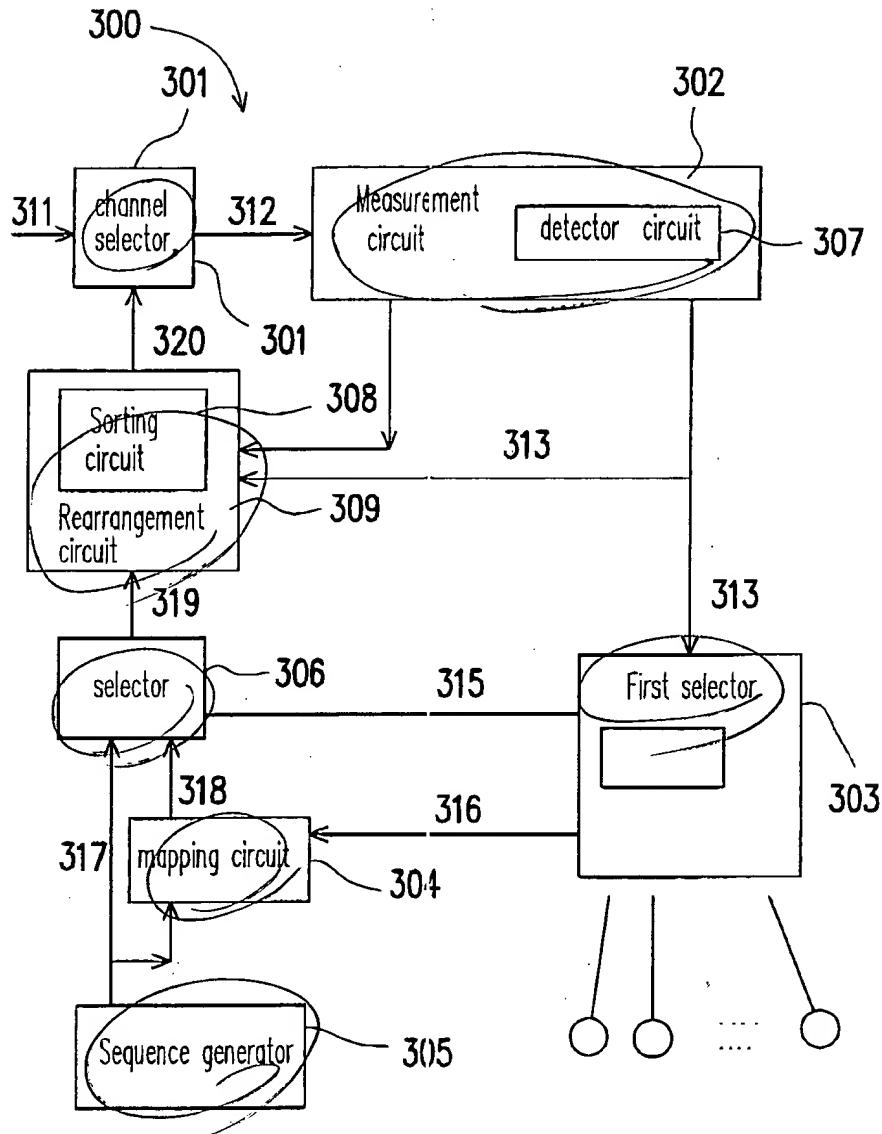


FIG. 1

Annotated Marked-up drawing**FIG. 3**

Annotated Marked-up drawing

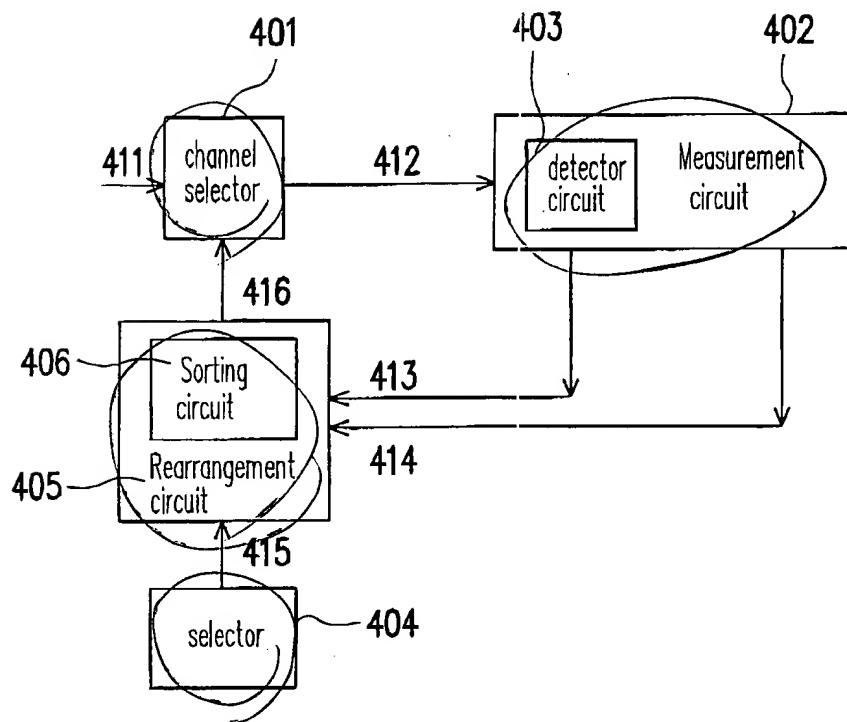


FIG. 4

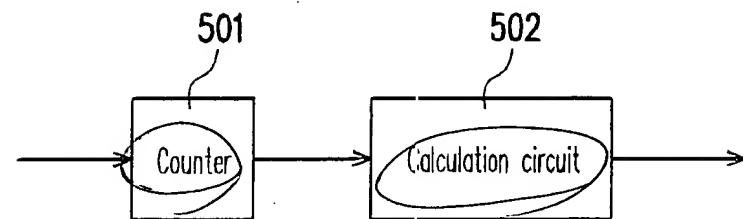
Annotated Marked-up drawing

FIG. 5

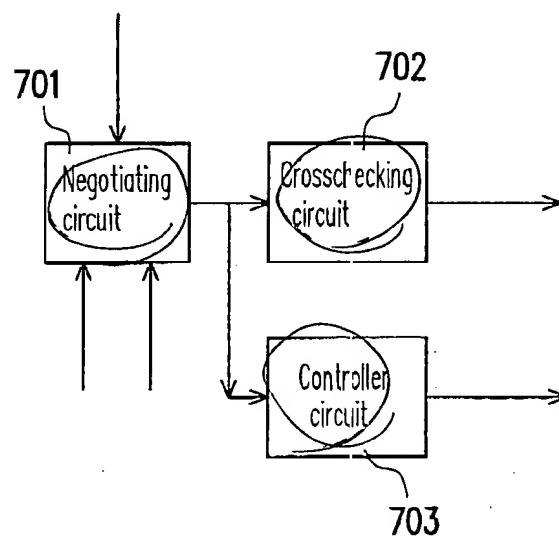


FIG. 7

Annotated Marked-up drawing

800

measuring N_p data collision ratios respectively corresponding to N_p partitions, responsive to a RF signal, the N_p data collision ratios having value of $R(i)$, i being from 1 through N_p and denoting an i th partition

801

selecting a partition sequence from Q partition sequences, the partition sequence having a smallest value of a selection value $H(p)$, wherein the selection value is a summation of $R(i)^*$ number of occurrence of the i th partition in each of Q partition sequences, p being from 1 through Q and denoting p th partition sequence

802

mapping the first sequence of M channels to the selected partition sequence to produce a second sequence of M channels

803

responsive to a control signal, selecting one of the first sequence and the second sequence as the hopping sequence

804

▼

Fig 8

Annotated Marked-up drawing

900

responsive to a RF signal, detecting an interference event within the RF signal

901

measuring N_p data collision ratios respectively corresponding to N_p partitions, responsive to a RF signal, the N_p data collision ratios having value of $R(i)$, i being from 1 through N_p and denoting an i th partition

902

selecting a partition sequence from Q partition sequences, the partition sequence having a smallest value of a selection value $H(p)$, wherein the selection value is a summation of $R(i)$ number of occurrence of the i th partition in each of Q partition sequences, p being from 1 through Q and denoting p th partition sequence

903

mapping the first sequence of M channels to the selected partition sequence to produce a second sequence of M channels

904

responsive to a control signal, selecting one of the first sequence and the second sequence as the hopping sequence

905

sorting $R(i)$ of N_p data collision ratios from the highest to the lowest to obtain P most interfered partitions, wherein the P is a predetermined value

906

rearranging the third sequence to obtain the hopping sequence in a predetermined manner, as an interference event is detected and the detected interference event occurs is within P most interfered partitions

907

Fig. 9